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A study to assess the effectiveness of a nurse led training programme on knowledge and attitude of risky behaviours among motorcycle operators in selected college at Chennai

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Abstract

Driving behaviours and attitudes are deemed critical factors in road safety. The present study examines risky driving attitudes and risky driving behaviours in motorcycle operators. A study was conducted to assess the effectiveness of nurse led training programme on knowledge and attitude of risky behaviours among motorcycle operators in selected college at Chennai. A pre-experimental one group pre-test post-test research design was adopted for the study and 30 young motorcyclists who full filled the inclusion criteria. The pretest knowledge was assessed by using self-structured questionnaire and attitude was assessed on 1st day by likert scale which includes affective cognitive and behaviour aspects and attitude towards safe motor cycle driving. The demonstration on hand signal for 30 minutes given on 2nd day, video teaching given on 3rd day regarding road safety for 30 minutes and 4th day pamphlets distribution to the samples on risky behaviour of motor cycle operators for 15 minutes. The post test was conducted on 5th day by using the same semi-structured questionnaire and Likert scale. The analysis revealed that the selected teaching strategies has improved the level of knowledge regarding risky driving behaviours among motorcyclists.

Keywords: Nurse led training programme, Risky behaviours, motor cycle operators.

Introduction

Motorized Two Wheeled Vehicles (MTV) account for a large proportion of road traffic in India and the riders of these vehicles have a high risk of road traffic injuries. The road safety plays an important role in a community wellbeing. Every year, more than 1.4 million people expire as result of accidents and road accident is the prime cause of fatalities on a worldwide scale.

The national crime records bureau of India indicated that around 150,785 people were killed, and 494,624 were injured due to road traffic injuries in 2016. There has been a fourfold increase in the number of road traffic crashes in India during the last four decades accompanied by 9.8 times increase in the fatalities associated with road crashes. Road traffic injuries place a massive burden on the health care sector in terms of hospitalization and rehabilitation. In a report published by the Government of India, there are 21.1 and 23.2% of fatal crash victims were in the age group of 18-25 years in 2016 and 2017 respectively.

Statement of the problem

A study to assess the effectiveness of a nurse led training programme on knowledge and attitude on risky behavior among motorcycle operator in selected college at Chennai.

Objectives

- To assess the level of knowledge and attitude on risky behaviour among motorcycle operators.
- To assess the effectiveness of a nurse led training programme on knowledge and attitude of risky behaviour among motorcycle operators

- To find the association between the post-test level of knowledge and attitude among motorcycle operators with their selected demographic variables.

Hypothesis

H1: There will be a significant difference between pre-test and post-test level of knowledge and attitude of risky behaviour among motorcycle operators after nurse led training programme.

H2: There will be a significant association between the post-test level of knowledge and attitude with their selected demographic variables of risky behavior among motorcycle operators.

Methodology

The study adopted a pre-experimental one group pre-test post-test research design. The study was conducted in selected setting in Chennai. There were 30 young motorcyclists who full filled the inclusion criteria were selected by using purposive sampling techniques. The pretest knowledge was assessed by using self-structured

questionnaire and attitude was assessed on 1st day by likert scale which includes affective, cognitive and behaviour aspects and attitude towards safe motor cycle driving. The demonstration on hand signal for 30 minutes given on 2nd day, video teaching given on 3rd day regarding road safety for 30 minutes and 4th day pamphlets distribution to the samples on risky behaviour of motor cycle operators for 15 minutes. The post test was conducted on day 10th by using the self-structured questionnaire and likert scale to assess knowledge and attitude towards safe motor cycle driving.

The analysis revealed that the selected teaching strategies has improved the level of knowledge and attitude regarding risky driving behaviours among motorcyclists.

Results and Discussion

The first objective was to assess the pre and post-test level of knowledge and attitude among motorcycle operators. The data was categorized into three knowledge levels such as poor, intermediate, and high. In the pre-test, all the samples 30(100.0%) reported that they had poor level of knowledge on risky behaviour.

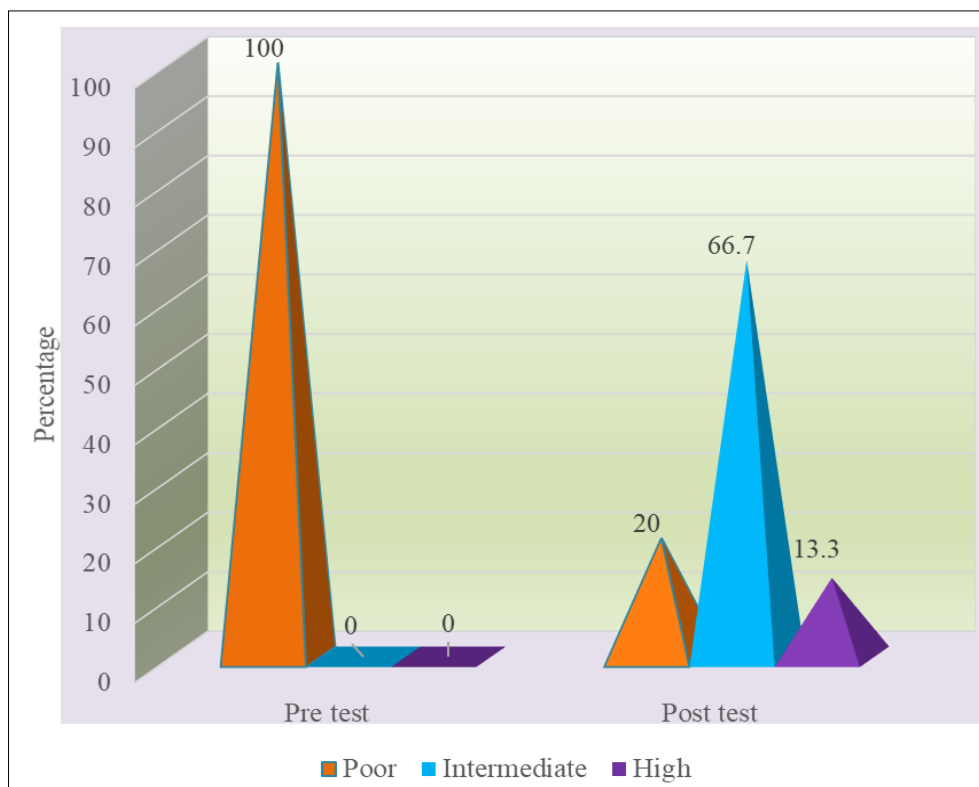


Fig 1 Presents the frequency and percentage distribution of level of knowledge among motorcycle operators in pre-test and post-test

The result shows that prior to nurse led training programme, none of the participants had a sufficient understanding of the risks associated with their riding behaviours. Whereas, in post-test, after the nurse led training programme, a substantial shift in knowledge levels was evident with most of the samples 20(66.7%) had intermediate level of knowledge, 4 (13.3%) had high level of knowledge and only a small proportion 6(20.0%) had poor knowledge. It concludes that the transformation in knowledge levels

underscores the effectiveness of the nurse led training programme, as the majority of participants significantly improved their understanding of risky behaviours associated with motorcycle operation.

With regard to attitude the data was categorized into three levels such as unfavourable, moderately favourable, and favourable. In the pre-test, all the samples 30(100.0%) reported that they had unfavourable level of attitude on risky behaviour.

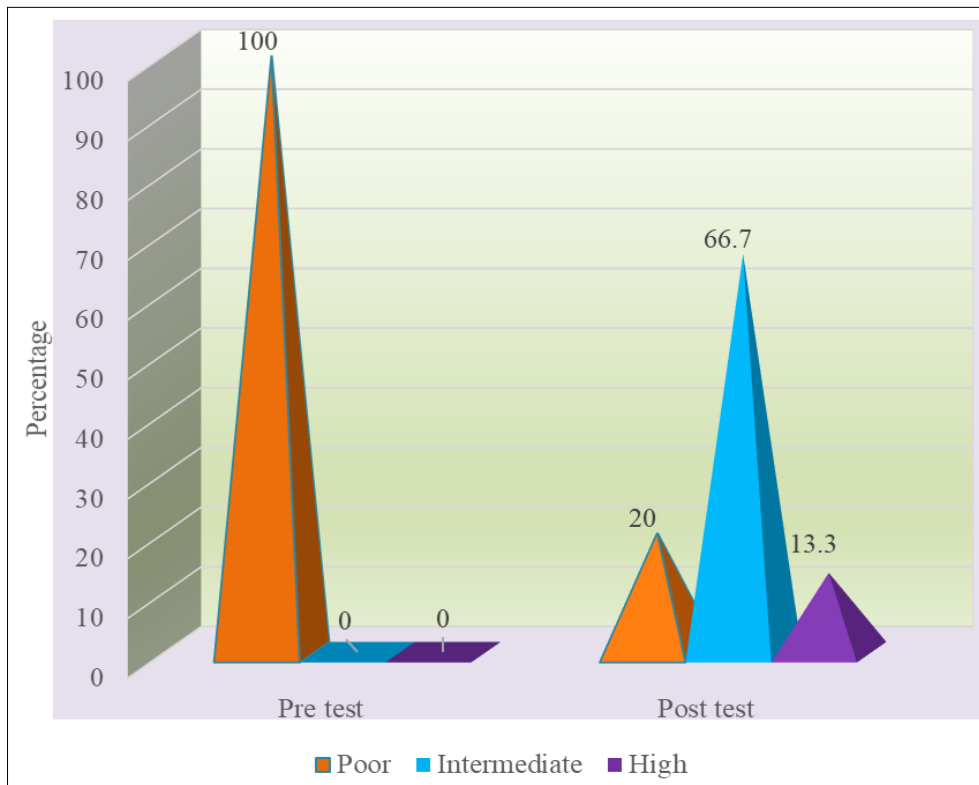


Fig 2: Presents the percentage distribution of level of attitude among motorcycle operators in pre-test and post-test.

Whereas, in post-test, after the training programme, there was a notable positive shift in attitudes. None of the participants retained with unfavourable attitude, indicating a significant transformation in their outlook. Most of the samples 20(66.7%) had favourable attitude and remaining a smaller portion 10(33.3%) had moderately favourable attitude.

The second objective to assess the effectiveness of a nurse led training programme on knowledge and attitude of risky behaviours among motorcycle operators

In the pre-test, samples had a mean knowledge score of 9.77, with a standard deviation of 2.239, indicating a relatively low level of knowledge about risky behaviour associated with motorcycle operation. Whereas in the post-test, there was a significant and remarkable improvement in participants' knowledge with mean knowledge score of 54.07 and standard deviation of 13.970. The paired t-value was 18.013 with 29 degrees of freedom (DF) and the corresponding significance value was as less than 0.05 ($p < 0.05$), indicating an extremely high level of statistical significance. Statistically, there was a significant difference between pre-test and post-test level of knowledge on risky behaviour among motorcycle operators after nurse led training programme. Hence, the hypothesis H_1 was accepted.

Table 1: Presents the mean knowledge score and standard deviation on risky behaviour among motorcycle operators in the pre-test and post-test and its level of significance N=30

Observation	Mean	Standard Deviation	Paired t-value DF=29	Sig value
Pre-test	9.77	2.239	18.013 *	0.000
Post-test	54.07	13.970		

* Significant at $p < 0.05$

The table concludes that the statistical analysis underscores the effectiveness of the training programme in enhancing

the knowledge of motorcycle operators regarding risky behaviours.

Table 2: Presents the mean attitude score and standard deviation on risky behaviour among motorcycle operators in the pre-test and post-test and its level of significance

Observation	Mean	Standard Deviation	Paired t-value DF=29	Sig Value
Pre-test	16.40	1.248	28.812 *	0.000
Post test	73.37	11.355		

* Significant at $p < 0.05$

With regards to attitude in the pre-test, participants had a mean attitude score of 16.40, with a standard deviation of 1.248, suggesting that their attitudes towards risky behaviour associated with motorcycle operation were relatively unfavourable. However, after the post-test, a significant and remarkable improvement in participants' attitudes was evident. The mean attitude score substantially increased to 73.37, accompanied by a standard deviation of 11.355, indicating a substantial shift towards more favourable attitudes. The paired t-value was 28.812 with 29 degrees of freedom (DF), and corresponding significance value was reported as less than 0.05 ($p < 0.05$), indicating an extremely high level of statistical significance. Statistically, H_1 : There was a significant difference between pre-test and post-test level of attitude of risky behaviour among motorcycle operators after nurse led training programme, was accepted. The table concludes that the statistical analysis highlights the effectiveness of the training programme in promoting safer and more responsible favourable attitudes among motorcycle operators regarding risky behaviours, and contributing to enhanced safety on the road. The third objective was to find the association between the demographic characteristics and the post-test level of knowledge and attitude on risky behaviour among motorcycle operators.

Table 3: Presents the association between the demographic characteristics and the level of knowledge on risky behaviour among motorcycle operators in the post-test, N=30

SL No.	Demographic Characteristics	Level of Knowledge			χ^2 Value	DF	Significant Value
		Poor	Intermediate	High			
Age in Years							
1	≤ 20 Years	1	13	3	5.023	2	0.081
	> 21 Years	5	7	1	NS		
Gender							
2.	Male	3	14	2	1.148	2	0.563
	Female	3	6	2	NS		
Year of Study							
3.	I Year /II Year	1	9	1	2.034	4	0.729
	III Year	2	5	1	NS		
	IV Year	3	6	2			
Type of Motorcycle							
4.	≤ 200 CC	5	17	3	0.240	2	0.887
	> 200 CC	1	3	1	NS		
Average hours riding in a week							
5.	< 6 hours	1	10	1	3.504	4	0.477
	6 - 10 hours	2	6	2	NS		
	>10 hours	3	4	1			
History of previous accidents							
6.	None	3	9	2	0.067	2	0.967
	≥ 1	3	11	2	NS		
Riding experience							
7.	≤ 4 Years	1	7	1	0.794	2	0.672
	> 4 Years	5	13	3	NS		

The finding from the table reveals that there was no significant association between the selected demographic characteristics such as age, gender, year of student, type of motorcycle, average hours riding in a week, history of

previous accidents and riding experience with the level of knowledge on risky behaviour among motorcycle operators in the post-test.

Table 4: Presents the association between the demographic characteristics and the level of attitude on risky behaviour among motorcycle operators in the post-test, N=30

SL No.	Demographic Characteristics	Level of Attitude		χ^2 Value	DF	Significant Value
		Moderately Favourable	Favourable			
Age in Years						
1	19 Years	4	4	1.800	3	0.615
	20 Years	3	6	NS		
	21 Years	2	8			
	22 Years	1	2			
Gender						
2.	Male	7	12	0.287	1	0.592
	Female	3	8	NS		
Year of Study						
3.	I Year	3	5	2.199	3	0.532
	II Year	1	2	NS		
	III Year	4	4			
	IV Year	2	9			
Type of Motorcycle						
4.	100-125 CC	2	2	0.814	2	0.665
	125-200 CC	6	15	NS		
	> 200 CC	2	3			
Average hours riding in a week						
5.	< 6 hours	7	5	6.075 *	2	0.048
	6 - 10 hours	1	9			
	>10 hours	2	6			
History of previous accidents						
6.	None	6	8	1.714	2	0.424
	1	3	6	NS		
	≥ 2	1	6			
Riding experience						
7.	< 1 Year	1	1	0.964	3	0.810
	1-2 Years	2	2	NS		
	2-4 Years	1	2			
	> 4 Years	6	15			

NS - Not significant at $p < 0.05$ * - Significant at $p < 0.05$

The finding from the table reveals that there was a statistically significant association between the average hours riding in a week with the level of attitude on risky behaviour among motorcycle operators and no significant association between the selected demographic characteristics such as age, gender, year of student, type of motorcycle, history of previous accidents and riding experience with the level of attitude on risky behaviour among motorcycle operators in the post-test.

Conclusion

This study was done to assess the knowledge on risky behaviours among motorcycle operators among adolescents in selected college at Chennai. The study proved that nurse led training programme was effective in improving the knowledge of motorcycle operators among adolescents. The study findings revealed that knowledge was significantly improved by the effective nurse led training programme on risky behaviours while driving.

Conflict of Interest

Not available

Financial Support

Not available

References

1. Truong LT, Nguyen HT, De Gruyter C. Correlations between mobile phone use and other risky behaviours while riding a motorcycle. *Accident Analysis & Prevention*. 2018;118:125-130.
2. Global status report on road safety. Geneva: World Health Organization; c2018.
3. Versen H. Risk-taking attitudes and risky driving behavior; c2018.
4. Ulleberg P, Rundmo T. Personality, attitudes and risk perception as predictors of risky driving behaviour among young drivers. *Safety Science*. 2003;41:427-443.

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